

## PYROLA AMERICANA Sweet

This species is closely allied to *P. elliptica*, but may be readily distinguished by its thick round leaves and longer sepals. Its flower ecology is essentially the same, but the stigmatic lobes are less elongated and do not show the bifid divisions found in the shinleaf. Although the flowers were under observation on several occasions for a long time both at Waldoboro and at the Knox Arboretum, Thomaston, where it is very common, no insect visitors were recorded.

WALDOBORO, MAINE.

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 NOTES FROM THE HERBARIUM OF THE UNIVERSITY  
OF WISCONSIN—XIII

NORMAN C. FASSETT

ASTRAGALUS CANADENSIS L., var. **longilobus**, n. var., calycis dentibus 2.5–5.5 mm. longis, tubo 4–5 mm. longo; calycibus et foliolis infra strigosis var. *typicum* simulantibus.—MINNESOTA: Willmar, July, 1892, *W. D. Frost* (Wis.<sup>1</sup>); Jefferson, July 20, 1889, *H. L. Lyons*, no. 257 (Minn.). IOWA: Decorah, July 13, 1881, *L. H. Pammel* (Ia.); common in thickets, along roadsides, etc., Chickasaw Co., July 11, 1926, *W. D. Spiker* (Ia.); Decatur Co., July 24, 1903, *J. P. Anderson* (Ia.). WISCONSIN: railroad cut, New Richmond, August 5, 1934, *N. C. Fassett*, no. 17104 (Wis.); Pine Bluff, August 6, 1889, *L. S. Cheney* (Wis.); Madison [about 1861], *T. J. Hale* (Wis.); Little Sturgeon, July, 1884, *J. H. Schuette* (Wis.; Field); sandy roadside, Binghampton, July 8, 1930, *W. E. Rogers*, no. 278 (TYPE in Herb. University of Wisconsin); roadside, low ground, Winchester, August 12, 1929, *N. C. Fassett & W. T. McLaughlin*, no. 9336 (Wis.). INDIANA: bank of Wabash River 1½ mi. south of East Mt. Carmel, rare here, June 18, 1918, *C. C. Deam*, no. 25469 (Deam); on wooded hillside east of Newburg, July 2, 1915, *Deam*, no. 16785 (Deam); wooded hills east of Winona Lake, Kosciusko Co., July 29, 1897, *Deam* (Deam; Field); 5 mi. northeast of Elkhart, July 2, 1921, *Deam*, no. 34424 (Deam).

The widespread typical *A. canadensis* has the calyx-lobes not more than one half the length of the tube (lobes 1–3 mm. long; tube 4.5–6 mm. long). *A. canadensis* var. *carolinianus* (L.) Jones,<sup>2</sup> of the southern Alleghenies, has the lobes usually more than half the length of the tube (lobes 2–3.7 mm. long; tube 4–5 mm. long). *A. canadensis* var.

<sup>1</sup> Specimens located as follows: Wis., University of Wisconsin; Minn., University of Minnesota; Ia., Iowa State College; Field, Field Museum of Chicago; Deam, Herbarium of C. C. Deam.

<sup>2</sup> Proc. Calif. Acad. ser. 2: v. 647 (1895).



*longilobus* is closely related to var. *carolinianus*, and often has the calyx-lobes better developed even than in that variety. In some individuals the lobes are longer than the tube, and on the specimen from Winchester, Wisconsin, an occasional lobe reaches 5.5 mm. in length and 2 mm. in width, and is distinctly foliaceous. The pubescence of var. *longilobus*, however, is identical with that of typical *A. canadensis*.

**OXYTROPIS chartacea**, n. sp., acaulis cespitosa; stipulis albis membranaceis, partibus connatis 7–15 mm. longis adpresse sericeo-villosis, partibus liberis 3–9 mm. longis glabris ciliatis; foliis 0.5–2.5 dm. longis, foliolis 9–17-jugis ovatis sericeo-pilosis, basi rotundis, saepe 2.3 cm. longis 7 mm. latis, margine subrevolutis; scapis 1.5–4 dm. longis sericeo-pilosis vel -villosis; spicis 3–12 cm. longis; bracteis calycem subaequantibus, subtus dense villosis, supra glabris vel glabratis; calycibus albo-tomentosis tubo 4–7 mm. longo, dentibus 1.5–3 mm. longis; corollis violaceis, deinde cyaneis; leguminibus suberectis chartaceis 1 cm. longis bilocularibus albo-pilosis saepe leviter nigro-pilosis; seminibus reniformis 1–1.2 mm. latis.—WISCONSIN: sandy beach of Pigeon Lake, Drummond, July 19, 1928, *Ludlow Griscom*; same locality, July 28, 1934, *N. C. Fassett*, no. 16478; sandy shore of "Lake Huron," Plainfield, September 15, 1934, *Fassett*, no. 16704 (TYPE in the Herbarium of the University of Wisconsin); sandy shore of Plainfield Lake, Plainfield, June 30, 1935, *S. C. Wadmond & N. C. Fassett*, no. 17386.

This species closely resembles *O. gaspensis* Fernald & Kelsey and *O. johannensis* Fernald. From the former it differs in its purple or blue flowers and villous bracts, and from the latter in its villous stipules and much smaller pods. From *O. Lamberti* and its relatives it differs in its papery pods, its densely tomentose calyx, its scapes with spreading pubescence, and the rounded bases of its leaflets.

**AMPHICARPA BRACTEATA** (L.) Fernald, var. **Pitcheri**, n. comb. *Glycine comosa* L. Sp. Pl. ii. 754 (1753), not *Falcata comosa* Am. Auct. *A. Pitcheri* T. & G., Fl. N. Am. i. 292 (1838).

In view of the doubt expressed by various writers, and indicated by numerous herbarium sheets with questioned determinations, of the distinctness of our two so-called species of *Amphicarpa*, it is surprising that varietal status for *A. Pitcheri* has not previously been proposed. Perusal of literature, and study in the herbarium and in the field, brings to light the following differences:

**A. BRACTEATA**: stem with closely reflexed white or yellowish hairs; median stipules 3 mm. long; terminal leaflet 1.3–6 cm. long; inflorescence simple, 1–8-flowered; floral bracts 2–2.5 mm. long, the lower exceeded by the pedicels; calyx-tube 4–5 mm. long, the teeth short and broad; blade



of keel-petals longer than the claw; pod glabrous on the face, the pubescence of the lower suture antrorse toward the base; seeds 3.5 mm. long.

*A. BRACTEATA* var. *PITCHERI*: stems with mostly spreading, reddish, villous hairs; median stipules 4–5 mm. long; terminal leaflet 5–10 cm. long; inflorescence branched, 7–17-flowered; floral bracts 2.5–3.5 mm. long, the lower exceeding the pedicels; calyx-tube 4.5–6 mm. long, the teeth lanceolate; blade of keel-petals about equalling the claw; fruit strigose on the face, the pubescence of the lower suture retrorse toward the base; seeds 3.8–5.5 mm. long.

However, it is difficult to find a specimen which can be identified as one species or the other by all of these characters, and there is not sufficient correlation among any of them to warrant specific differentiation. Indeed, not one of these characters is of a clean-cut qualitative nature; var. *Pitcheri* is simply a vigorous, coarser, more villous form of *A. bracteata*. The ranges of the two are almost identical, *A. bracteata* extending farther northeastward, and var. *Pitcheri* going farther south, rarely into Mexico.

*PETALOSTEMUM PURPUREUM* (Vent.) Rydb., f. **pubescens** n. comb. *P. violaceum* var. *pubescens* Gray, Pl. Wright. i. 46 (1852), in part. *P. pubescens* Heller, Muhlenbergia i. 28 (August, 1901), in part, not *P. pubescens* A. Nels.

*P. virgatum* Scheele, Linnaea xxi. 461 (1848) is identified with this by Gray. *P. violaceum* var. *pubescens* as described by Gray was a mixture, the Wright and Lindheimer plants belonging to *P. pulcherrima* Heller (*P. virgatum* Scheele, not Nees & Schw.), but the Fendler plant, cited as type, is a pubescent phase of *P. purpureum*. This form, with tomentose stem and villous, gland-dotted leaves, is sporadic throughout the range of the species; there are specimens in the Gray Herbarium from Minnesota, Iowa, South Dakota, Nebraska, Oklahoma, Texas, Saskatchewan, Alberta, Montana, Wyoming, Colorado and New Mexico. *P. purpureum* var. *molle* (Rydb.) A. Nels. is a more well-marked local phase of the species, with the leaves practically without glands, and like the stem densely pilose.

*DESMODIUM GRANDIFLORUM* (Walt.) DC. As has been demonstrated by Blake<sup>1</sup> and by Schindler<sup>2</sup> *Hedysarum grandiflorum* Walt. was not the *D. grandiflorum* of recent manuals, but *D. bracteosum* (Michx.) DC. The latter name, however, should not be displaced by *D. grandiflorum*, for, as Blake pointed out, there was an earlier *H. grandiflorum* Pall.<sup>3</sup> The adoption, in 1930, of the "homonym rule" makes invalid the name *D. grandiflorum* as applied to any American plant.

<sup>1</sup> Bot. Gaz. lxxviii. 277 (1924).

<sup>2</sup> Fedde, Rep. xxii. 276 (1926).

<sup>3</sup> Reise ii. 743 (1773).



The *D. grandiflorum* of ed. 7 of Gray's Manual, then, becomes *D. ACUMINATUM* (Michx.) DC.,<sup>1</sup> while the *D. bracteosum* of Gray's Manual remains *D. BRACTEOSUM* (Michx.) DC.<sup>2</sup> The description of *H. bracteosum* Michx. includes the phrase "stipulis subulatis" which hardly applies to *D. bracteosum* as at present understood, but a copy of the Flora Boreali-Americana annotated by M. L. Fernald in the Michaux Herbarium bears the note "*bracteosum* OK," and Schindler appears also to have examined the type of *H. bracteosum*.

*GLEDITSIA TRIACANTHOS* L., forma **inermis**, n. comb. *G. triacanthos*,  $\beta$ . *inermis* Pursh, Fl. Am. Sept. i. 221 (1814).

Trees lacking the spines of ordinary *G. triacanthos* are of sporadic occurrence with the commoner type, and do not constitute a true variety.

The writer wishes to acknowledge the courtesy of the staff of the Gray Herbarium in making available to him the facilities of that institution.

MADISON, WISCONSIN.

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## NEW RUST SPECIES AND HOSTS FROM RHODE ISLAND

WILLIS R. HUNT

FORTY-TWO rust species, and fourteen hosts for thirty previously listed rusts, were reported for the first time as new to Rhode Island by the writer in *The Uredinales or Rusts of Connecticut and the other New England States* (Conn. State Geol. and Nat. Hist. Surv. Bul. 36: 1-198. 1926). The collections were made for the most part by Farlow of Harvard, Collins of Brown, and the author while studying rusts at Yale under Dr. G. P. Clinton. Numerous collections have been made since then by the writer, and five new rust species, two rust varieties, and five new hosts from this state are here reported for the first time. The specimens are in the writer's herbarium at Osborn Botanical Laboratory, Yale University.

In the treatment of rusts in this paper the sequence to show relationship other than that indicated by hosts, and nomenclature used by Arthur in the *Manual of the Rusts in the United States and Canada*, 1934, will be followed. The authorities for the hosts are those of

<sup>1</sup> For synonymy see Schindler, l. c., 258. He takes up *D. glutinosum* Muhl. for this species, but in view of the questionable priority of *D. glutinosum* over *H. acuminatum* it seems inadvisable to displace a name long familiar in American botanical literature.

<sup>2</sup> For synonymy see Schindler, l. c., 276.